

Thermomechanical analysis of poly(urethanes) produced from recycled raw materials

Bakirova I., Romanov D., Gubanov E., Zenitova L.
Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

The thermomechanical properties of reclaimed PU samples, containing various amounts of degraded waste products of these polymers, were studied. As the degraded PU content increases, the network density and the thermal stability of the elastomer decrease, while the rubberlike deformability and the melt viscosity increase. Despite certain narrowing of the working temperature range of the reclaimed polymers, their mechanical properties are retained even for a 15-% filling with degraded materials.
